

A decorative graphic on the left side of the slide. It consists of a blue parallelogram and a light green parallelogram, both tilted at an angle. The blue shape is in the foreground, and the green shape is partially behind it. They are set against a dark blue background with faint, lighter blue diagonal stripes.

# MANTID Architecture Overview



# Overview

- Introduce where mantid fits in within facility ecosystem
- Describe general architecture of system
- Overview of where mantid runs



# Manipulation and Analysis Toolkit for Instrument Data

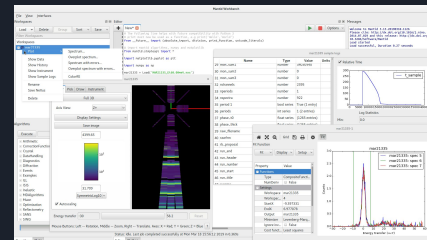
- A high performance computation framework for scientific data.
- Manipulate and analyse Neutron and Muon data.
  - Neutron Scattering
    - Diffraction, spectroscopy, small angle, reflectometry
  - Muon Spectroscopy
  - Could be applied to other techniques
- Open Source
- Advanced graphing and visualisation UI.
- Multiple Platforms

# Facility Ecosystem

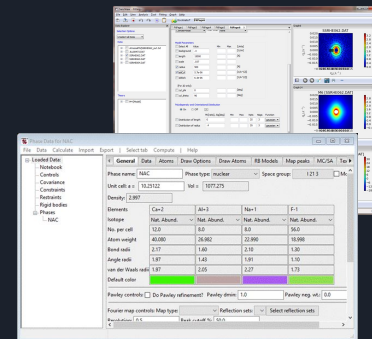


Data  
Collection

**NX**  
NeXus/Raw  
File



Mantid

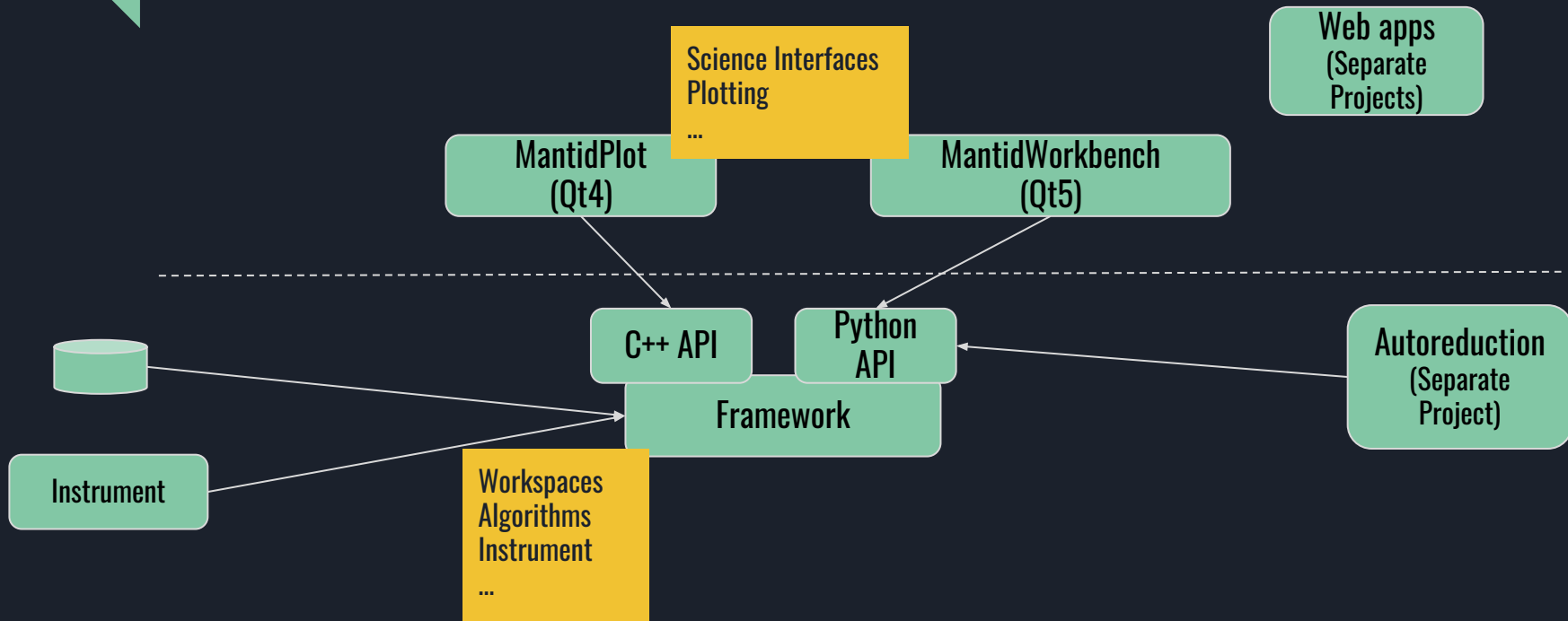


Other  
analysis  
programs...

Live Data



# Mantid Architecture





# Environments (where is mantid running)

- Official support for:
  - Windows
  - RedHat 7/CentOS 7
  - Ubuntu 16.04/18.04
  - MacOS 10.10+
- Installable to any users machines
- Used by Autoreduction service for automatic processing of data as it is collected
- Installed in new ISIS Data Analysis as a Service (IDAaaS) platform
- Installed in legacy ISISCompute platform

## Location Data





# Summary

- MANTID is designed to be flexible and integrate with other software/systems
- MANTID is mission critical software for many facilities